

CLAIMS

1. A battery device that is a first or a second battery devices and housed in a single battery housing chamber of an electronic device, characterized in that:

5 each of the first and second battery device comprises

a case having side surfaces located on both ends of a width direction, an upper surface and lower surface located on both ends of a thickness direction, and a front surface and a rear surface located on both ends of a length direction;

a charging unit disposed inside the case; and

10 a battery side terminal disposed on the front surface of the case and connected to the charging unit;

wherein the case of the first battery device and the case of the second battery device have a substantially same width and length while the case of the second battery device is formed with thickness larger than the case of the first battery device;

15 wherein the battery side terminal disposed on the first battery device and the battery side terminal disposed on the second battery device are located at a same position on the respective front surfaces with respect to the lower surfaces and the side surfaces;

20 wherein an engaging recessed part is formed on the front surface of the case of the second battery device;

wherein a dimension from the lower surface of the case of the second battery device to a position close to the lower surface on a wall of the case where the engaging recessed part is formed and a dimension from the lower surface to the upper surface of the case of the first battery device are arranged to be a same.

25

2. The battery device according to claim 1, characterized in that:

a plurality of the engaging recessed parts is formed in the width direction with a gap in between.

30 3. The battery device according to claim 1, characterized in that:

each of the first and second battery device comprises a frame and a film attached to portions of the frame excluding a front and back side portions of the frame.

4. The battery device according to claim 3, characterized in that:

35 the film is attached to the frame so as to wrap around the entire circumference excluding the front and back side portions of the frame; and

the battery device further includes slant parts disposed on side surfaces of the frame, which correspond to the side surfaces of the case, each of the slant parts facing

toward the front or back side of the frame, an amount of protrusion from the frame being increased starting from the middle position in the length direction of the frame to the front or back side portion of the frame, the slant part making continuous connection to the front and back side portion.